

Case of the Month

“David”

- 6yo QH gelding lesson horse
- H/o chronic intermittent mild right forelimb lameness and "bench knee" confirmation
- Presented for acute onset severe RF lameness (4/5).
- Palpation: moderate middle carpal joint swelling effusion, no heat.
- Positive to carpal flexion.
- Diagnostic anesthesia: 60% improve with IA middle carpal joint

Radiographs



Radiographs



Radiographs



Findings

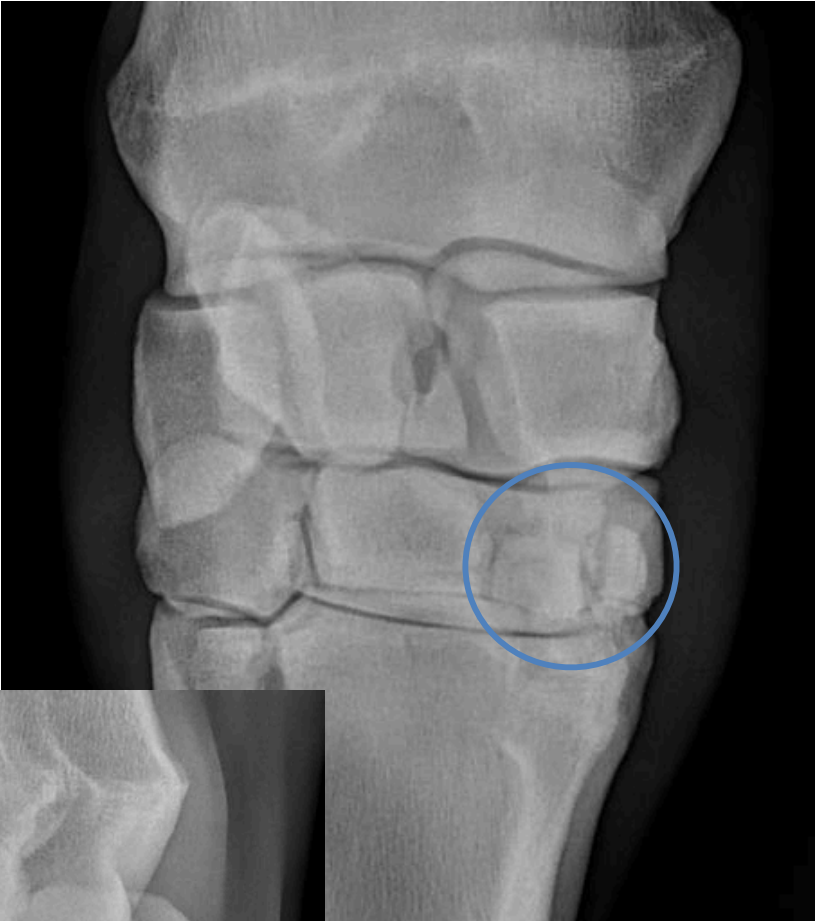
- Mild to moderate narrowing and undulating margin of the 2nd metacarpal and 2nd carpal joint
- Moderate sclerosis of the 2nd carpal bone and proximal aspect of the 2nd metacarpal bone
- Indistinct central linear lucency, 2nd carpal bone, best seen on the DMPLO image.
- Incidental 1st carpal bone present
- Small osseous fragment dorsomedial carpometacarpal joint.

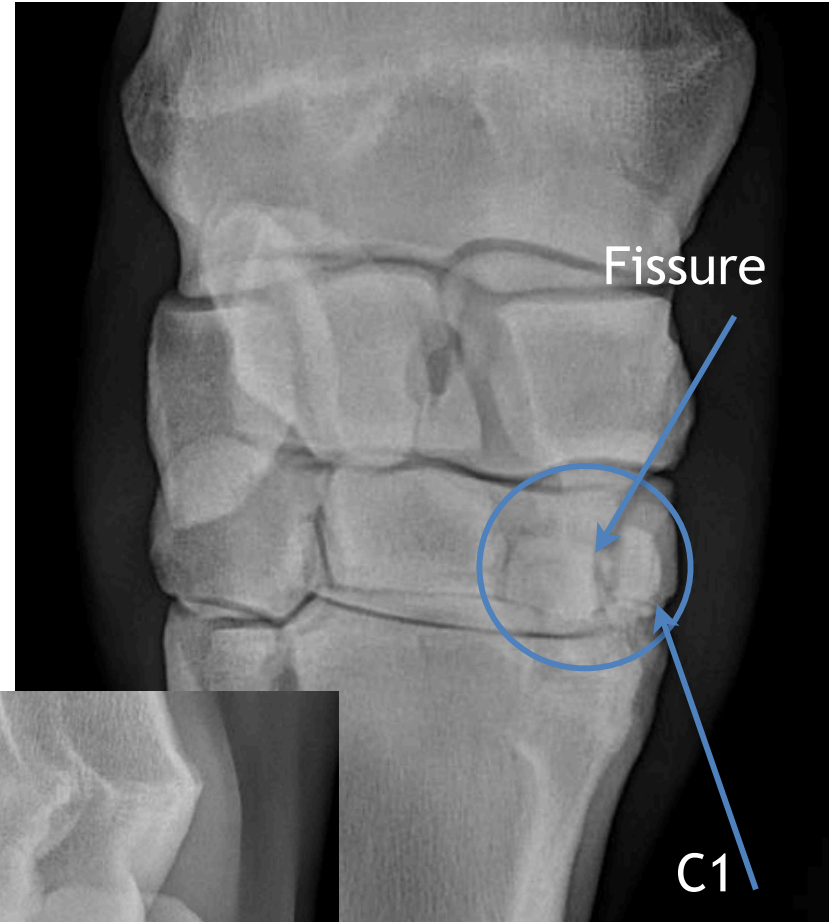
DX:

- Suspect compression fracture 2nd carpal bone
- Moderate osteoarthritis of the 2nd carpal and 2 metacarpal joint
- Chip fracture, carpometacarpal joint.

CT, MRI







Findings

- Cyst-like lesion 2nd carpal bone surrounded by marked sclerosis
- Narrowing of the 2nd carpal bone and MCII articulation.
- Linear fissure extending from the cyst-like lesion to the mid-body of 2nd carpal bone.

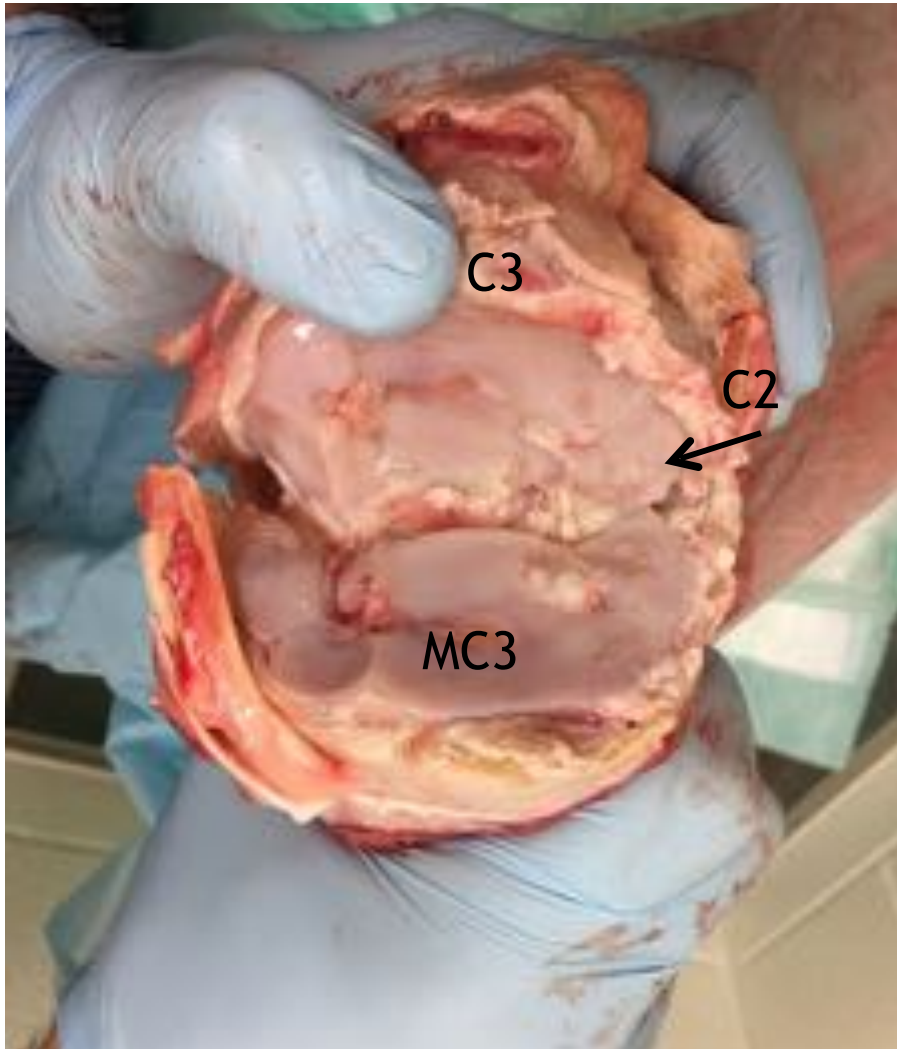
Dx:

Severe osteoarthritis, 2nd carpal and 2nd metacarpal joint.

The osseous cyst-like lesion is most likely traumatic in origin and may have lead to an incomplete fracture of the 2nd carpal bone.

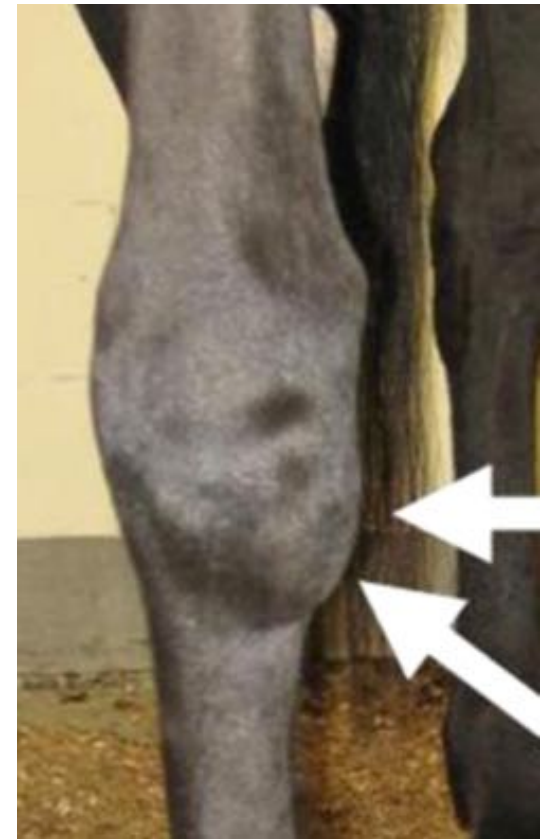
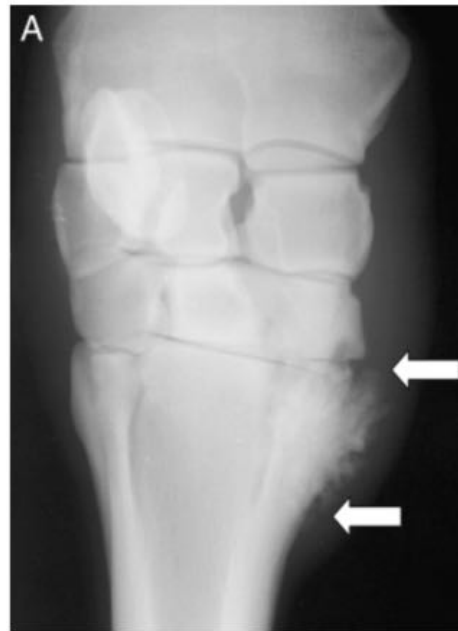
- NB: Osseous cyst-like lesions may or may not be associated with lameness. They are often a result of subchondral trauma and sclerosis. Alternatively, they can result from congenital

Post-mortem images



- Multiple full thickness cartilage erosions 2nd carpal bone and apposing MCII.
- Central deep cartilage fissure corresponding to a fissure line and cyst-like lesion on imaging.

- **Carpometacarpal osteoarthritis** is recognized as a severe clinical syndrome, common in Quarter Horses and Arabians.
 - Most common site is MC2/C2 articulation.
- **Clinical Presentation:** Chronic severe lameness, firm swelling over the MC2/C2 articulation, positive flexion, remission of lameness with IA anesthesia of the middle carpal joint.
- **Radiographic features:** Proliferative new bone, narrowed joint space, and subchondral lysis.
- **Prognosis:** Guarded to poor



Panizzi et al 2009, Vet Surg